IN THE CLAIMS:

Please cancel claims 22, 23, 25, and 26; and amend claims 1, 9, and 16 as follows:

1. (Currently amended) An automated calibration system to track a selected object through a series of frames of data, comprising:

a display device to display at least one image frame received from an image input device, wherein the image frame includes a calibration rectangle;

an image selection device to select, via the calibration rectangle, the selected object in the at least one image frame;

an image source device to provide a hue saturation value (HSV) data array of pixels forming the at least one image frame; and

a processing device to determine analysis data for pixels within the calibration rectangle, based on the HSV data array, and determine test analysis data for a set of adjacent test windows, each of the adjacent test windows having a same shape and a same pixel size as the calibration rectangle, wherein tracking data, to track the selected object, is selected from one of the calibration rectangle and the adjacent test windows having a lowest sum of a hue standard deviation and a saturation standard deviation, and each of the adjacent test windows share at least one pixel with the calibration rectangle.

2. (Cancelled)

3. (Original) The system of claim 1, wherein the image input device is a digital camera.

4. (Previously presented) The system of claim 1, wherein the image

source device and the processing device are part of a single device.

5. (Previously presented) The system of claim 1, wherein the processing device calculates a mean hue and a standard deviation of a hue of the pixels representing the selected object.

6. (Previously presented) The system of claim 5, wherein if at least one of the mean hue and the standard deviation of the hue is less than predetermined levels, the selected object is not tracked.

7. (Previously presented) The system of claim 1, wherein the processing device calculates a mean saturation and a standard deviation of a saturation of the pixels representing the selected object.

8. (Previously presented) The system of claim 7, wherein if at least one of the mean saturation and the standard deviation of the saturation is less than a predetermined level, the selected object is not tracked.

9. (Currently amended) A method of calibrating a computer-vision system to track a selected object through a series of frames of data, comprising:

displaying at least one image frame from an image input device, wherein the image frame includes a calibration rectangle;

providing an image selection device to select the selected object, via the calibration rectangle, from the at least one image frame;

determining a hue saturation value (HSV) data array of pixels forming the at least one image frame;

determining analysis data for pixels within the calibration rectangle based on the HSV data array; and

determining test analysis data for a set of adjacent test windows, each of the adjacent test windows having a same shape and a same pixel size as the calibration rectangle, wherein tracking data, to track the selected object, is selected from the one of the calibration rectangle and the adjacent test windows having a lowest sum of a hue standard deviation and a saturation standard deviation, and each of the adjacent test windows share at least one pixel with the calibration rectangle.

10. (Previously presented) The method of claim 9, wherein the method further includes converting a pixel data array for the at least one image frame from a red-green-blue colorspace (RGB) data array to the HSV data array.

11. (Previously presented) The method of claim 28, further including applying the pixel data from an entire frame to the pixel-classification look-up map, wherein if the amount of the pixels associated with the selected object is greater than a predetermined amount, the calibration method restarts.

12. (Cancelled)

13. (Previously presented) The method of claim 10, wherein the method further includes thresholding the HSV data array of pixels and disregarding pixel data for each of the pixels having a product of a saturation coordinate and a value coordinate below a predetermined threshold amount.

14. (Previously presented) The method of claim 10, wherein the method further includes calculating a mean hue and a standard deviation of a hue of the pixels in the selected object.

15. (Previously presented) The method of claim 14, wherein the method includes restarting the calibration method if at least one of the mean hue and the

standard deviation of the hue is less than a predetermined level.

16. (Currently amended) The method of claim 10, wherein the method further includes calculating a mean saturation and a standard deviation of a saturation of the pixels in the selected object.

17. (Previously presented) The method of claim 16, wherein the method includes restarting the calibration method if one of the mean saturation and the standard deviation of the saturation is less than a predetermined level.

18. (Previously presented) The method of claim 10, wherein the method further includes allowing the user to select the selected object.

19-20. (Cancelled)

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21. (Previously presented) The system of claim 1, wherein the processing device further includes a thresholding module to disregard pixel data for each of the pixels having a product of a saturation coordinate and a value coordinate below a predetermined threshold amount.

22-23. (Cancelled)

24. (Previously presented) The system of claim 1, wherein each of the adjacent test windows have at least one pixel overlapping with the calibration rectangle.

25-26. (Cancelled)

27. (Previously presented) The method of claim 9, wherein each of the adjacent test windows have at least one pixel overlapping with the calibration rectangle.

28. (Previously presented) The method according to claim 9, wherein the method further includes creating a pixel-classification look-up map for the HSV data array of pixels, and the pixel classification map classifies the pixels belonging to the

selected object based on a hue and a saturation of the pixels.

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